PHYSICS ABSTRACTS

SECTION A

of

SCIENCE ABSTRACTS

SECTION A, PHYSICS
SECTION B, ELECTRICAL ENGINEERING

VOL. 58
1955

Edited and Issued by

THE INSTITUTION OF ELECTRICAL ENGINEERS
SAVOY PLACE, LONDON, W.C.2

In Association with

THE PHYSICAL SOCIETY

THE INSTITUTE OF PHYSICS

THE AMERICAN PHYSICAL SOCIETY

THE AMERICAN
INSTITUTE OF ELECTRICAL ENGINEERS

Physics Abstracts is a member of the I.C.S.U. Abstracting Board (International Council of Scientific Unions), and is designated by that body as the recognized abstracting journal for physics in English. The other co-operating physics abstracting journals are *Bulletin Analytique du C.N.R.S.* (French); and *Physikalische Berichte* (German).

U OF I
LIBRARY

SCIENCE ABSTRACTS

Committee of Management

1954–55

THE INSTITUTION OF ELECTRICAL ENGINEERS

THE PRESIDENT (*ex officio*)

S. WHITEHEAD, M.A., Ph.D., M.I.E.E. (*Chairman*)

L. G. BRAZIER, Ph.D., B.Sc., M.I.E.E.

L. HARTSHORN, D.Sc., M.I.E.E.

J. W. T. WALSH, O.B.E., D.Sc., M.A., M.I.E.E.

THE PHYSICAL SOCIETY

J. H. AWBERY, B.A., B.Sc.

A. G. GAYDON, D.Sc., Ph.D., F.R.S.

D. ROAF, M.A., D.Phil.

MISS A. C. STICKLAND, M.Sc., Ph.D.

THE INSTITUTE OF PHYSICS

E. R. DAVIES, O.B.E., F.Inst.P.

THE ROYAL SOCIETY

T. E. ALLIBONE, D.Sc., Ph.D., M.I.E.E., F.R.S.

THE BRITISH ELECTRICITY AUTHORITY

L. W. JAMES, M.A., A.M.I.E.E.

OBSERVER FOR THE AMERICAN PHYSICAL SOCIETY

W. N. ARNQUIST, Ph.D., B.Sc.

Editor

B. M. CROWTHER, M.A., Ph.D., F.Inst.P.

Assistant Editors

G. N. J. BECK, B.Sc., A.M.I.E.E., A.Inst.P.

N. R. FOWLER, A.R.C.S., D.I.C., F.Inst.P.

R. R. O. SKELTON, B.A.

CONTENTS

(The figures after entries refer to page numbers)

Abstractors	iv	Supplement to List of Journals	x
Errata	vi	Author Index	1309
Transliteration of Russian, Serbian and Bulgarian for Bibliographical Purposes	viii	Subject Index	1477
Journals Abstracted Completely	ix	Collected List of Subject Index Headings	1635

51	MATHEMATICS	1, 85, 189, 305, 437, 549, 661, 749, 861, 981, 1085, 1201
52	ASTRONOMY. ASTROPHYSICS. GEODESY	1, 85, 189, 306, 438, 549, 661, 749, 862, 982, 1085, 1202
53	PHYSICS	4, 88, 194, 309, 440, 555, 667, 753, 865, 987, 1087, 1207
530.1	Fundamentals	4, 88, 195, 310, 440, 556, 667, 753, 866, 987, 1088, 1209
531	General mechanics. Mechanics of solids	10, 96, 204, 316, 563, 671, 872, 993, 1095, 1215
531.7	Mechanical measurements	10, 97, 205, 317, 448, 563, 671, 760, 872, 994, 1095, 1215
532	Mechanics of fluids	10, 97, 205, 317, 449, 564, 672, 761, 873, 995, 1096, 1216
532.6	Capillarity	13, 98, 206, 318, 450, 565, 673, 763, 874, 996, 1097, 1216
532.7	Molecular theory of liquids	13, 98, 207, 318, 450, 565, 674, 763, 874, 996, 1097, 1217
533	Mechanics of gases	14, 99, 208, 320, 451, 566, 675, 765, 875, 997, 1098, 1218
533.7	Molecular theory of gases	15, 100, 209, 321, 568, 675, 765, 876, 999, 1099, 1220
534	Vibrations. Acoustics	15, 100, 209, 322, 452, 568, 676, 766, 877, 999, 1099, 1220
535	Optics. Radiation. Spectra	21, 103, 217, 328, 456, 575, 678, 769, 884, 1005, 1102, 1226
536	Heat	30, 112, 228, 342, 472, 586, 685, 781, 897, 1014, 1115, 1234
536.7/.8	Thermodynamics	32, 115, 233, 347, 476, 590, 689, 784, 900, 1020, 1119, 1237
537	Electricity	33, 116, 233, 348, 477, 590, 690, 785, 900, 1020, 1120, 1238
537.2	Electrostatics. Dielectrics	33, 116, 233, 348, 477, 590, 690, 785, 900, 1020, 1120, 1238
537.3	Electric conduction. Currents	35, 118, 234, 351, 593, 692, 788, 902, 1023, 1122, 1240
537.52	Electric discharges	38, 123, 241, 359, 487, 599, 695, 794, 908, 1028, 1130, 1244
537.531	X-rays	38, 124, 244, 360, 489, 601, 696, 798, 912, 1029, 1132, 1245
537.533/.534	Cathode rays. Positive rays	39, 124, 245, 360, 489, 602, 696, 799, 912, 1029, 1133, 1246
537.54	Discharge tubes. Counters	43, 127, 250, 363, 492, 607, 700, 804, 917, 1033, 1137, 1249
537.56/.58	Ionization. Thermionics	43, 127, 252, 366, 493, 608, 702, 805, 919, 1035, 1140, 1250
537.591	Cosmic rays	44, 129, 253, 368, 494, 610, 704, 806, 921, 1037, 1142, 1251
538	Magnetism	46, 132, 257, 369, 497, 611, 705, 809, 922, 1038, 1143, 1253
538.3/.5	Electromagnetism. Electrodynamics	48, 135, 262, 375, 499, 615, 707, 813, 925, 1040, 1147, 1257
538.56	Electromagnetic waves and oscillators	48, 136, 262, 376, 500, 616, 707, 813, 925, 1040, 1148, 1257
539.1	Molecular and atomic structure	50, 137, 265, 377, 501, 617, 711, 816, 927, 1042, 1150, 1259
539.11	Theory of solid state	50, 137, 265, 377, 501, 617, 711, 816, 927, 1042, 1150, 1259
539.13	Molecules	51, 138, 266, 378, 503, 618, 712, 818, 929, 1042, 1152, 1259
539.15	Atoms. Nucleus. Isotopes	54, 142, 268, 387, 507, 622, 716, 822, 934, 1048, 1155, 1262
539.16	Radioactivity. α-, β- and γ-rays	58, 145, 272, 392, 511, 626, 717, 825, 939, 1051, 1161, 1265
539.17	Nuclear reactions	61, 150, 280, 397, 518, 630, 720, 829, 944, 1057, 1165, 1272
539.18	Atom and molecule beams. Mesons. Neutrons	65, 157, 284, 403, 523, 632, 724, 833, 948, 1063, 1170, 1276
539.2	Structure of solids	68, 162, 287, 406, 527, 636, 726, 840, 951, 1066, 1176, 1282
539.3/.8	Elasticity. Strength. Rheology	69, 168, 289, 409, 528, 637, 727, 842, 954, 1068, 1178, 1283
541	PHYSICAL CHEMISTRY	70, 169, 292, 412, 530, 639, 729, 844, 957, 1071, 1181, 1288
541.11/.12	Phase equilibrium. Chemical reactions	70, 169, 292, 412, 530, 639, 729, 844, 957, 1071, 1181, 1288
541.13	Electrochemistry	72, 170, 293, 414, 531, 644, 730, 845, 958, 1072, 1183, 1290
541.14/.15	Photochemistry. Radiation chemistry	72, 173, 294, 415, 531, 645, 730, 846, 960, 1073, 1183, 1290
541.18	Dispersions. Colloids. Adsorption	74, 174, 295, 416, 531, 646, 730, 847, 961, 1074, 1183, 1291
541.2/.6	Chemical structure	74, 174, 296, 417, 532, 848, 1076, 1184, 1292
543/545	Chemical analysis	74, 175, 296, 418, 533, 648, 731, 848, 962, 1077, 1184, 1292
548	CRYSTALLOGRAPHY	75, 175, 296, 419, 533, 649, 731, 850, 963, 1077, 1184, 1293
548.7	Atomic and X-ray crystallography	75, 175, 297, 419, 535, 650, 732, 850, 965, 1077, 1185, 1294

Continued

55	GEOPHYSICS	79, 178, 300, 425, 539, 655, 739, 854, 970, 1082, 1191, 1298
551.5	Atmosphere. Meteorology	79, 180, 301, 426, 540, 656, 740, 856, 971, 1082, 1192, 1299
57/59	BIOLOGY	81, 185, 304, 431, 544, 660, 859, 973, 1083, 1196, 1304
61	Medical science. Human physiology	81, 185, 304, 431, 544, 660, 859, 973, 1083, 1196, 1304
62/69	TECHNIQUE. MATERIALS	83, 187, 304, 434, 546, 660, 748, 860, 976, 1084, 1197, 1307
77	Photography	83, 187, 304, 434, 546, 660, 748, 860, 976, 1084, 1197, 1307

ABSTRACTORS

C. B. Allsopp, M.A., Ph.D., D.Sc., F.Inst.P.
F. Ansbacher, Ph.D.
E. A. Ash, Ph.D., A.C.G.I., D.I.C.
B. B. Austin, B.Eng.
D. G. Avery, Ph.D.
I. D. L. Ball, B.Sc.
E. H. W. Banner, M.Sc., M.I.Mech.E., F.Inst.P., M.I.E.E.
D. R. Barber, B.Sc., F.Inst.P., F.R.A.S., F.R.P.S., F.R.Met.Soc.
W. Bardsley, B.Sc., Ph.D., A.Inst.P.
R. F. Barrow, B.Sc., M.A., D.Phil., A.R.C.S.
A. H. W. Beck, B.Sc.(Eng.), A.M.I.E.E.
A. Beer, M.A., Ph.D., F.R.A.S.
J. S. Bell, B.Sc.
W. J. G. Beynon, Ph.D., D.Sc., F.Inst.P.
W. T. Blackband, B.Sc., M.Sc., A.M.I.E.E.
A. V. Brehme (now Mrs. Payne).
T. P. Brody, B.Sc., Ph.D.
F. Brook.
G. E. Brown, Ph.B., Ph.D.
G. M. Brown, M.A., M.Sc., F.R.A.S., A.Inst.P.
F. Busemann, Dr.Ing., A.M.I.E.E.
J. E. Caffyn, B.Sc., F.Inst.P.
L. G. Carpenter, B.A., B.Sc., F.Inst.P.
J. M. Cassels, Ph.D.
T. A. Chalmers, B.Sc., Ph.D.
D. R. Chick, M.Sc.
J. Cleugh, M.A.
R. W. J. Cockram, A.I.Mech.E., A.M.I.E.E.
H. C. Cole, M.Sc.
A. H. Cook, M.A., Ph.D.
N. Corcoran, M.Sc.Tech., A.M.I.E.E.
V. E. Cosslett, M.A., Ph.D.
I. D. Craggs, M.Sc., Ph.D., F.Inst.P.
L. Csuros, Dipl.Ing., A.M.I.E.E.
P. Cucka, Ph.D.
P. M. Davidson, B.A., Ph.D.
R. O. Davies, M.Sc., D.Phil.
A. E. De Barr, B.Sc., F.Inst.P.
S. Dedijer, B.A.
E. M. Dembinski, Dipl.Ing.
E. H. Dock, M.Sc., A.R.C.S., D.I.C., F.Inst.P.
A. T. Dover, M.I.E.E.
G. du Cloux.
J. M. C. Dukes, M.A., D.I.C., A.M.I.E.E.
S. C. Dunn, M.Sc., A.M.I.E.E.
J. Dutton, B.Sc., Ph.D., A.Inst.P.
M. Ebert.
D. L. Edwards, A.R.C.S., D.I.C., F.R.A.S.
A. J. Egginton, B.Sc.
R. Eisenschitz, Dr.phil., D.Sc., F.Inst.P.
H. Elliot, M.Sc., Ph.D.
J. Ewles, M.A.
F. T. Farmer, B.Sc.(Eng.), Ph.D., F.Inst.P., M.I.E.E.
G. Field, Ph.D.
R. W. Fish, M.Sc., A.R.C.S.
J. Franks, Ph.D., A.Inst.P.
J. H. Fremlin, M.A., Ph.D., F.Inst.P., A.M.I.E.E.
M. W. Friedlander, M.Sc., Ph.D.
G. F. J. Garlick, B.Sc., Ph.D., D.Sc., F.Inst.P.
A. G. Gaydon, Ph.D., D.Sc., F.R.S.
A. Gelbtuch, B.Sc., A.C.G.I.
L. S. Goddard, B.Sc., Ph.D.
R. H. Golde, Dipl.Ing., Ph.D., M.I.E.E., A.Am.I.E.E.
W. Good, D.Sc., A.R.T.C.(Glasgow), A.R.I.C.
M. A. Grace, M.A., D.Phil.
S. J. Gregg, B.Sc., D.Sc., A.R.C.S.
E. Gros, Dipl.Ing.
M. E. Haine, M.Sc., F.Inst.P., M.I.E.E.
E. D. Hart, M.A., A.Inst.P., A.M.I.E.E.
J. Hawgood, B.A., D.Phil.
S. T. Henderson, M.A., Ph.D., B.Sc., F.R.I.C., F.Inst.P.
W. A. Hepner, Ph.D.
F. E. Hoare, Ph.D., A.R.C.S., D.I.C.
H. H. Hodgson, B.Sc., M.A., Ph.D., F.R.I.C.
G. F. Hodsman, Ph.D., F.Inst.P.
C. A. Hogarth, Ph.D., A.Inst.P.
H. H. Hopkins, Ph.D., D.Sc., F.Inst.P.
M. R. Hopkins, M.Sc., Ph.D., F.Inst.P.
J. M. Hough, M.A.
G. Howells, B.Sc., A.Inst.P.
J. Hughes, B.Sc., Ph.D.
H. F. Hunt, B.Sc., M.I.E.E.
J. Iball, Ph.D., D.Sc., F.Inst.P., F.R.S.E.
J. Jacobs, Ph.D.
R. G. Jakeman, D.Sc.(Eng.), M.I.E.E.
N. S. Japolsky, Dr.(Eng.), M.I.E.E.
H. Jefferson, M.A.
J. C. E. Jennings, B.Sc., Ph.D.

H. G. Jerrard, B.Sc., A.Inst.P.
N. L. Johnson, M.Sc., Ph.D., F.I.A.
A. Karlsbad, Dipl.Ing., M.I.E.E.
A. E. Kay, B.Sc., Ph.D.
E. W. Kellermann, Dr.phil., Ph.D.
A. J. Kennedy, Ph.D., A.M.I.E.E., F.Inst.P.
N. M. King, M.Sc.
H. R. J. Klewe, Dr.phil.
B. F. Kraus, Dipl.Ing.
G. J. Kynch, Ph.D., A.R.C.S., D.I.C.
F. Lachman, Dipl.Ing.Chem.
A. Landman, Dipl.Ing., M.I.E.E.
P. T. Landsberg, Ph.D.
A. D. Le Claire, B.A.
A. A. Linsell, A.C.G.I., A.M.I.E.E.
P. Linton, B.Sc., A.M.I.Mech.E., A.M.I.E.E.
G. I. W. Llewelyn, B.Sc., Ph.D., A.R.I.C.
W. M. Lomer, M.Sc., Ph.D.
H. London, Dr.phil.
G. F. Lothian, M.A., F.Inst.P.
J. Lukaszewicz, B.Sc.(Eng.).
D. V. Mabbs, B.Sc., A.Inst.P.
A. L. Mackay, M.A., B.Sc., Ph.D., A.Inst.P.
I. McKerrow, B.Sc.(Eng.), A.M.I.Mech.E., A.M.I.E.E.
M. W. Makowski, Dipl.Ing., Ing.E.S.E., A.M.I.E.E.
J. R. Mallard, B.Sc., Ph.D., A.Inst.P.
C. R. S. Manders, M.A., Ph.D., F.Inst.P.
E. G. Martin, F.R.A.S.
G. Martelli, D.Phys.
J. H. Mason, B.Sc., A.Inst.P., A.M.I.E.E.
P. T. Matthews, M.A., Ph.D.
A. J. Mee, M.A., B.Sc.
J. W. Menter, Ph.D.
H. Miller, M.A., Ph.D., F.Inst.P.
C. G. Morgan, M.Sc., Ph.D., A.Inst.P.
D. W. Mortifee, A.M.I.E.E.
H. Motz, M.A., M.Sc., Dr.Ing.
R. C. Murray, Ph.D.
L. E. Mussell, B.Sc., A.Inst.P.
R. Neumann, Dipl.Ing., A.M.I.Mech.E.
R. A. Newing, Ph.D., A.R.C.S., F.R.A.S.
H. Norel, Dipl.Ing., A.M.I.E.E.
J. G. Oldroyd, M.A., Ph.D.
M. W. Ovenden, M.A., B.Sc., F.R.A.S.
C. F. Partridge, B.Sc., M.I.E.E.
A. P. Paton, B.Sc., A.M.I.Mech.E., A.M.I.E.E.
A. V. Payne, M.A.
R. S. Pease, M.A.
J. J. Phipps, B.Sc.
L. Pincherle, Ph.D.
C. F. Pizzey.
A. T. Price, B.Sc., M.Sc., D.Sc.
D. J. A. Prowse, B.Sc., Ph.D.
E. Rabkin, B.Sc.
J. M. Radcliffe, Ph.D.
R. S. Read, M.A., B.Sc., A.R.C.S., F.Inst.P.
A. Reddish, B.Sc.
R. Reed, M.Sc., Ph.D.
T. J. Rey, B.Sc.(Eng.), M.A.
F. F. Roberts, B.Sc.(Eng.), A.M.I.E.E.
P. Rothwell, M.A.
A. Schofield, M.Sc., F.Inst.P.
A. Sczaniecki, Dipl.Ing.
L. R. Shepherd, Ph.D.
D. Shoenberg, Ph.D., F.R.S.
R. S. Sidorowicz, Dipl.Ing., D.I.C.
G. D. Sims, B.Sc., M.Sc., Ph.D., A.R.C.S., D.I.C.
A. J. Small, B.Sc., Ph.D., M.I.E.E.
E. H. Sondheimer, Ph.D.
J. A. Spink, M.Sc.
H. G. M. Spratt, B.Sc., M.I.E.E.
A. O. Stanesby, M.A.
J. C. Stark, B.Sc., A.M.I.E.E.
H. J. H. Starks, B.Sc., Ph.D., D.I.C., F.Inst.P.
C. E. Stille, B.Sc.(Eng.), A.C.G.I., D.I.C., A.M.I.Mech.E., A.M.I.E.E.
W. R. Stoker, B.Sc.(Eng.), M.I.E.E.
A. R. Stokes, M.A., Ph.D.
W. G. Stripp, A.M.I.E.E.
P. A. Sturrock, Ph.D.
W. J. Swiatecki, B.Sc., Ph.D., A.R.C.S.
J. B. Sykes, M.A., D.Phil.
R. Syski, B.Sc., D.I.C., Dipl.Ing.
A. J. Taylor.
E. O. Taylor, B.Sc., D.I.C., A.C.G.I., M.I.E.E.
J. Thewlis, D.Sc., F.Inst.P.
J. S. G. Thomas, D.Sc., A.R.C.S., F.R.I.C.
S. Tolansky, D.Sc., Ph.D., F.R.S.
T. C. Toye, B.Sc., A.Inst.P.
C. Turner, D.Phys.
J. Van Waasdijk.
J. W. T. Walsh, M.A., D.Sc., M.I.E.E.
M. Waters, B.Sc., M.I.E.E.
R. A. Weale, Ph.D., A.Inst.P.
S. Weintroub, M.A., F.Inst.P.
V. G. Welsby, Ph.D., A.M.I.E.E.
D. H. Whiffen, M.A., D.Phil.
A. C. Whiffin, B.Sc., M.Sc.(Eng.), Ph.D., A.M.I.Mech.E.
J. A. Wilcken, B.Sc., Ph.D.
J. J. Wilkins, B.Sc.
A. Wilkinson, B.Sc.
C. E. Williams, B.Sc., A.Inst.P.
A. P. Wilmshurst, A.C.G.I., A.M.I.E.E.
A. J. C. Wilson, M.Sc., Ph.D., A.I.M., F.Inst.P.
G. Wittenberg, A.M.I.Mech.E.
E. P. Wohlfarth, B.Sc., Ph.D., A.Inst.P.
Z. F. Wojnar.
A. K. Wolicki.
A. B. Wood, D.Sc., F.Inst.P.
J. L. Wright, B.Sc.
V. V. Zakharov, B.Sc.

A.E.I. Research Laboratory. Abstracts signed thus have been contributed by members of the staff of the Research Laboratory of Associated Electrical Industries, Ltd., Aldermaston, Berkshire.

The initial "A" is used to indicate an abstract prepared from the summary published with the article.

ERRATA

Abstr. 3627 (1949), line 2: *for* GRATCHIANSKAYA *read* GRATSIANSKAYA.

Author Index (1952), p. 1205, column 1: The entry "Note on Schwinger's variational method, 777" under K. KATO should be under T. KATO.

Abstr. 6745 (1953): insert N. DAVY as second author.
Author Index (1953), p. 1203, column 2, line 23: *for* 381 *read* 831.

Abstr. 5333 (1954), line 2: *for* A. HUETZ *read* AUBERT-HUETZ.
Abstr. 6577 (1954), line 2: *for* E. MENDOSA *read* E. MENDOZA.
Abstr. 6602 (1954), line 3: for *No.* 3–5 read *No.* 1–2.
Abstr. 7242 (1954), line 8: *for* and were *read* was.
Abstr. 9268 (1954), line 3: for (*July*, 1953) read (*Oct.*, 1953).
Abstr. 10009 (1954), line 7: *for* or vacuum *read* vacuum or.
Abstr. 10844 (1954), line 3: *for* **4**, 407–10 *read* **4**, *No.* 4, 475–8.
Abstr. 10901 (1954), line 3: *for* **4**, 403–6 *read* **4**, *No.* 4, 471–4.
Abstr. 10903 (1954), lines 2 and 3: *for* **4**, 432–8 *read* **4**, *No.* 4, 500–6.
Abstr. 10904 (1954), line 2: *for* **4**, 411–20 *read* **4**, *No.* 4, 479–88
Abstr. 10905 (1954), line 2: *for* **4**, 441–6 *read* **4**, *No.* 4, 509–14
Abstr. 10907 (1954), line 3: *for* **4**, 439–40 *read* **4**, *No.* 4, 507–8.
Abstr. 10908 (1954), line 3: *for* **4**, 447–50 *read* **4**, *No.* 4, 515–18.
Abstr. 11480 (1954), line 3: *for* 1302–10 *read* 1307–10.
Abstr. 11687 (1954), line 4: *for* **4**, 421–31 *read* **4**, *No.* 4, 489–99.
Author Index (1954), p. 1554, column 2, line 10: *for* GUINANO, S. *read* GUINAND, S.
p. 1656, column 1, line 42: *for* GUINANO, S. *read* GUINAND, S.
Author Index (1954), p. 1651, column 2: Insert 10783 after 6274 in entry under TAKAHASHI, Y. and delete entry under TAKAGASHI, Y.

Abstr. 26 (1955), line 2: *for* $g_{\mu\nu}$ *jp read* $g_{\mu\nu}$ *;p.*
Abstr. 72 (1955), line 2: *for* GINSBURG *read* GINZBURG.
Abstr. 141 (1955), line 2: *for* 450 *read* 518.
Abstr. 384 (1955), line 16: *for* 1400 *read* 140.
Abstr. 488 (1955), line 7: *for* of the nuclear surface *read* at the nuclear surface.
Abstr. 527 (1955), lines 2 and 3: *for* L. B. MAGNUSSEN *read* L.B. MAGNUSSON.
Abstr. 1015 (1955), line 4: *for* +0·3 eV *read* +0·18 eV.
Abstr. 1231 (1955), line 3: *for* ROSENTAL' *read* ROZENTAL.
Abstr. 2707 (1955), line 7: *for* 1 *read* 0.
Abstr. 2844 (1955), line 3: *for* J. JURKIEWICZ *read* L. JURKIEWICZ.
Abstr. 3244 (1955), line 3: *for* 75–120 *read* 6–42.
Abstr. 3245 (1955), line 3: *for* 38–74 *read* 3–48.
Abstr. 3383 (1955), line 5: *for* to decimal places *read* to 10 decimal places.
Abstr. 3385 (1955), Table 2: *for* 0(·1)10 *read* 0(·01)10.
Table 4: *insert* 9*D at end.*
Abstr. 3853 (1955), line 5: *for* waves *read* curves.
Abstr. 3957 (1955), line 5: *for* Pt I *read* Pt II.
Abstr. 4832 (1955), lines 2 and 3: *for* J. JANSEN and L. M. DAWSON *read* L. JANSEN and J. M. DAWSON.
Abstr. 5288 (1955), line 2: *for* M. F. CANAC *read* F. CANAC.
Abstr. 5348 (1955), line 2: *for* M. G. NOMARSKI *read* G. NOMARSKI.
Abstr. 5552 (1955), line 2: *for* H. PREUSZ *read* H. PREUSS.
Abstr. 5583 (1955), line 4: *add at end of line* energy to the diffuseness of the surface.
Abstr. 5686 (1955), line 8: *for* Gittl *read* GITTL.
Abstr. 5907–8, 5918, 5982, 6081, 6094, 6138, 6180, 6295, 6440, 6519, 6544 (1955), journal reference: *for* Vol. **16** *read* Vol. **10**.
Abstr. 6072 (1955), line 2: *for* KROLAC *read* KROLAK.
Abstr. 6158 (1955), line 4: *for* H. G. VAN BEUREN *read* H. G. VAN BUEREN.
Abstr. 6311 (1955), line 2: *for* H. KORNETZKI *read* M. KORNETZKI.
Abstr. 6484 (1955), line 1: *for* **Report on** *read* **Report of.**
Abstr. 6564 (1955), line 1: *for* V. L. TIMAN *read* B. L. TIMAN.
Abstr. 7084 (1955), line 1: *for* **h.v.** *read* **h.f.**
Abstr. 8410 (1955), line 3: *for* CHANDRASEKARAN *read* CHANDRASEKHARAN.
Abstr. 8458 (1955), line 8: *insert* H. L. ANDERSON and S. K. ALLISON *as authors.*
Abstr. 9012 (1955), line 8: *for* 1150 *read* 11150.
Abstr. 10002 (1955), line 2: *for* MANIVA *read* MANIWA.

CORRECTIONS TO ARTICLES

Corrections have been published, as shown below, to the articles whose abstract numbers are given. Unless otherwise stated, the volume and page given refer to the journal named in the abstract, i.e. the journal in which the original article was published.

Abstr. 3131 (1950): **9a**, *No.* 12, 1056 (*Dec.*, 1954).
Abstr. 5040 (1952): **23**, *No.* 2, 399 (*Feb.*, 1955).
Abstr. 5518 (1953): **25**, *No.* 5(11), 632 (1953).
Abstr. 5897 (1953): **25**, *No.* 9, 924 (*Sept.*, 1954).
Abstr. 6169 (1953): **27**, *No.* 1, 76 (*Jan.*, 1955).
Abstr. 6564 (1953): **27**, *No.* 1, 180 (*Jan.*, 1955).
Abstr. 8455 (1953): **26**, *No.* 3, 303 (*March*, 1955).
Abstr. 37 (1954): **122**, *No*, 1, 208 (*July*, 1955).
Abstr. 967 (1954): **50**(A) *No.* 9–10, 215 (*Sept.–Oct.*, 1954).
Abstr. 3163 (1954): **27**, *No.* 1, 179 (*Jan.*, 1955).
Abstr. 3955 (1954): **22**, *No.* 11, 1949 (*Nov.*, 1954).
Abstr. 4102 (1954): **12**, *No.* 8, 385 (1955).
Abstr. 4653 (1954): **9**, *No.* 6, 1037 (*Nov.–Dec.*, 1954).
Abstr. 4768 (1954): **98**, *No.* 6, 1870 (*June* 15, 1955).
Abstr. 4877 (1954): **96**, *No.* 6, 1713 (*Dec.* 15, 1954).
Abstr. 5376 (1954): **26**, *No.* 5, 871 (*Sept.*, 1954).
Abstr. 6602 (1954): **15**, *No.* 1, 55–6 (1954).
Abstr. 6839 (1954): **13**, *No.* 2, 224 (*Feb.*, 1955).
Abstr. 6864 (1954): **96**, *No.* 6, 1713 (*Dec.* 15, 1954).
Abstr. 7518 (1954): **26**, *No.* 2, 253–4 (*Feb.*, 1955).
Abstr. 7671 (1954): **96**, *No.* 6, 1713 (*Dec.* 15, 1954).
Abstr. 8574 (1954): **26**, *No.* 4, 472 (*Oct.*, 1954).
Abstr. 9220 (1954): **22**, *No.* 12, 2099 (*Dec.*, 1954).
Abstr. 9406 (1954): **25**, *No.* 12, 1553 (*Dec.*, 1954).
Abstr. 9421 (1954): **26**, *No.* 2, 233 (*Feb.*, 1955).
Abstr. 9431 (1954): **4**, 292 (*April*, 1955).
Abstr. 9456 (1954): **96**, *No.* 6, 1714 (*Dec.* 15, 1954).
Abstr. 9894 (1954): **40**, *No.* 9, 870 (*Sept.*, 1954).
Abstr. 9981 (1954): **9**, *No.* 5, 881 (*Sept.–Oct.*, 1954).
Abstr. 10247 (1954): **12**, *No.* 6, 293 (1955).
Abstr. 10347 (1954): **239**, *No.* 15, 925 (*Oct.* 11, 1954).
Abstr. 10445 (1954): **15**, *No.* 10, 698 (*Oct.*, 1954).
Abstr. 10597 (1954): **23**, *No.* 7, 1374 (*July*, 1955).
Abstr. 10801 (1954): **26**, *No.* 4, 472 (*Oct.*, 1954).
Abstr. 11279 (1954): **15**, *No.* 10, 704 (*Oct.*, 1954).
Abstr. 11388 (1954): **98**, *No.* 6, 1871 (*June* 15, 1955).
Abstr. 11450 (1954): **96**, *No.* 6, 1714 (*Dec.* 15, 1954).
Abstr. 11452 (1954): **96**, *No.* 6, 1714 (*Dec.* 15, 1954).
Abstr. 149 (1955): **27**, *No.* 1, 180 (*Jan.*, 1955).
Abstr. 244 (1955): **23**, *No.* 4, 763 (*April*, 1955).
Abstr. 353 (1955): **68**, *Pt* 1, 58 (*Jan.*, 1955).
Abstr. 584 (1955): **23**, *No.* 1, 221 (*Jan.*, 1955).
Abstr. 587 (1955): **23**, *No.* 2, 398 (*Feb.*, 1955).
Abstr. 588 (1955): **22**, *No.* 12, 2099 (*Dec.*, 1954).
Abstr. 735 (1955): **12**, *No.* 5, 697 (*Nov.*, 1954).
Abstr. 1103 (1955): **23**, *No.* 2, 401 (*Feb.*, 1955).
Abstr. 1288 (1955): **98**, *No.* 6, 1870 (*June* 15, 1955).
Abstr. 1616 (1955): **26**, *No.* 9, 888 (*Sept.*, 1955).
Abstr. 1618 (1955): **26**, *No.* 9, 1187 (*Sept.*, 1955).
Abstr. 2125 (1955): **98**, *No.* 6, 1870 (*June* 15, 1955).
Abstr. 2142 (1955): **98**, *No.* 6, 1870 (*June* 15, 1955).
Abstr. 2189 (1955): **33**, *No.* 8, 492 (*Aug.*, 1955).
Abstr. 2586 (1955): **23**, *No.* 8, 1559 (*Aug.*, 1955).
Abstr. 2654 (1955): **26**, *No.* 6, 783 (*June*, 1955).
Abstr. 2936 (1955): **23**, *No.* 4, 762 (*April*, 1955).
Abstr. 3090 (1955): **98**, *No.* 6, 1870 (*June* 15, 1955).
Abstr. 3131 (1955): **98**, *No.* 6, 1870 (*June* 15, 1955).
Abstr. 3239 (1955): **23**, *No.* 4, 762 (*April*, 1955).
Abstr. 3441 (1955): **12**, *No.* 6, 814 (*Dec.*, 1954).
Abstr. 3645 (1955): **12**, *No.* 8, 385 (1955).
Abstr. 3940 (1955): **23**, *No.* 6, 1178 (*June*, 1955).
Abstr. 4056 (1955): **98**, *No.* 6, 1871 (*June* 15, 1955).
Abstr. 4179 (1955): **98**, *No.* 6, 1871 (*June* 15, 1955).
Abstr. 4369 (1955): **16**, *No.* 3–4, 192 (1955).
Abstr. 4861 (1955): **13**, *No.* 2, 225 (*Feb.*, 1955).
Abstr. 4872 (1955): **13**, *No.* 1, 127 (*Jan.*, 1955).
Abstr. 4896 (1955): **98**, *No.* 6, 1871 (*June* 15, 1955).
Abstr. 4906–7 (1955): **13**, *No.* 1, 127 (*Jan.*, 1955).
Abstr. 6186 (1955): **141**, *No.* 5, 659 (1955).
Abstr. 6461 (1955): **13**, *No.* 2, 225 (*Feb.*, 1955).
Abstr. 6544 (1955): **10**, *No.* 8, 727 (*Aug.*, 1955).
Abstr. 6708 (1955): **241**, *No.* 1, 136 (*July* 4, 1955).
Abstr. 6808 (1955): **10**, *No.* 7, 593 (*July*, 1955).
Abstr. 7662 (1955): **122**, *No.* 2, 361 (*Sept.*, 1955).
Abstr. 7818 (1955): **241**, *No.* 6, 584 (*Aug.* 8, 1955).
Abstr. 8129 (1955): **10**, *No.* 9, 828 (*Sept.*, 1955).
Abstr. 8406 (1955): **26**, *No.* 9, 888 (*Sept.*, 1955).

THE RECOMMENDED SYSTEM – ENGLISH-CYRILLIC

English Letters	Languages	Cyrillic Letters	English Letters	Languages	Cyrillic Letters
a	R S B	А а	p	R S B	П п
b	R S B	Б б	r	R S B	Р р
ch	R S B	Ч ч	s	R S B	С с
d	R S B	Д д	sh	R S B	Ш ш
e	R S B	Е е	shch	R	Щ щ
ë	R	Ё ё	sht	B	Щ щ
é	R	Э э	t	R S B	Т т
ê	R B	Ѣ ѣ	t'	R B	Ть ть
f	R S B	Ф ф	t'	S	Ћ ћ
g	R S B	Г г	th	R	Ѳ ѳ
i	R S B	И и	ts	R S B	Ц ц
ī	R	І і	t-s	R S B	Тс тс
ĭ	R B	Й й	u	R S B	У у
j	S	Ј ј	ŭ	B	Ъ ъ
j'	S	Ђ ђ	ū	B	Ж ж
k	R S B	К к	v	R S B	В в
kh	R S B	Х х	y	S	Ј j
l	R S B	Л л	ȳ	R	Ы ы
l'	R B	Љ љ	y̆	R	Ѵ ѵ
l'	S	Љ љ	ya	R B	Я я
m	R S B	М м	yu	R B	Ю ю
n	R S B	Н н	z	R S B	З з
n'	R B	Њ њ	zh	R S B	Ж ж
n'	S	Њ њ	‘	R	Ъ ъ
o	R S B	О о	’	R B	Ь ь

Notes:

The use of l', n' and t' in Russian and Bulgarian (where they are not transliterations of a single letter, but merely l, n or t followed by the soft sign) is included to emphasize the fact that they are used for single letters only in Serbian.

Shch and sht invariably represent the letter Щ in Russian and Bulgarian respectively, since the pairs of letters (ШЧ in Russian and ШТ in Bulgarian) seem never to occur consecutively in the respective languages.

JOURNALS ABSTRACTED COMPLETELY

The following list gives the names of those journals whose contents, being entirely original contributions in Physics or Electrical Engineering, are currently being abstracted completely in one or other section of *Science Abstracts* (transient and non-scientific items excepted). This list supersedes lists published earlier.

Acta Physica Austriaca
Acta Physica Hungarica
Acta Physica Polonica
Acustica
Advances in Physics
Akustische Beihefte
Alta Frequenza
American Journal of Physics
Annalen der Physik
Annales de Physique
Annales de Radioélectricité
Annales de Télécommunication
Archiv der elektrischen Übertragung
Archiv für Elektrotechnik
Arkiv för Fysik
Australian Journal of Physics
Bell System Technical Journal
British Journal of Applied Physics
Cahiers de Physique
Canadian Journal of Physics
Czechoslovak Journal of Physics
Electronics
Elektrichestvo
Frequenz
Helvetica Physica Acta
Hochfrequenztechnik und Elektroakustik
Indian Journal of Physics
Indian Journal of Theoretical Physics
Journal of the Acoustical Society of America
Journal of Applied Physics
Journal of Chemical Physics
Journal of Electronics
Journal of the Optical Society of America
Journal of the Physical Society of Japan
Journal de Physique et le Radium
Journal of Scientific Instruments
Nuovo Cimento
Optica Acta
Optik
Philosophical Magazine
Physica
Physical Review
Proceedings of the Institute of Radio Engineers
Proceedings of the Institution of Electrical Engineers
Proceedings of the Physical Society
Progress of Theoretical Physics
Radiotekhnika
Reports of the Physical Society on Progress in Physics
Review of Scientific Instruments
Reviews of Modern Physics
Revue d'Optique
Scientia Electrica
Transactions of the American Institute of Electrical Engineers
Wireless Engineer
Zeitschrift für angewandte Physik
Zeitschrift für Naturforschung (a)
Zeitschrift für Physik
Zhurnal Eksperimentalnoĭ i Teoreticheskoĭ Fiziki

An abstract is only published in *Science Abstracts* when an article or book is believed to be generally available. No abstracts are published of dissertations, reports, or memoranda with limited circulation, unless copies have been deposited with several public libraries; nor of papers presented orally at meetings, unless précis of substantial length are published in the normal way.

Thus the appearance of an abstract in *Science Abstracts* may generally be taken as an indication that the original is publicly available, and information for its identification and acquisition, if not given in the abstract, will be found elsewhere in *Science Abstracts*.

If no indication of language is given in the abstract, the article may be assumed to be in English. This does not necessarily hold, however, for abstracts reprinted from elsewhere, as indicated at the foot of the abstract.

SUPPLEMENT TO LIST OF JOURNALS

The following is the third annual Supplement to the List of Journals published in January, 1953 (contained in Volume 56) and gives additions and alterations made since December, 1954. The addresses are believed to be correct at the time of going to press (December, 1955), but no responsibility can be accepted for errors.

ACEC Rev.	*ACEC Revue.* Formerly *Ateliers de Constructions Electriques de Charleroi* [A.C.E.C. Charleroi]. Ateliers de Constructions Electriques de Charleroi, Rue Vital Francoisse, Marcinelle–Charleroi, Belgium.
Amer. math. Monthly	*American Mathematical Monthly.* [Abstracted by *Mathematical Reviews*].
Amer. Mineralogist	*American Mineralogist.* [Abstracted by The British Scientific Instrument Research Association].
Ann. Math.	*Annals of Mathematics.* [Abstracted by *Mathematical Reviews*].
Ann. sci. Ecole Normale Supér.	*Annales Scientifiques de l'Ecole Normale Supérieure.* Gauthier-Villars, Quai des Grands-Augustins 55, Paris.
Atomic Energy Canada Rep.	*Atomic Energy of Canada Ltd. Reports.* Scientific Document Distribution Office, Atomic Energy of Canada Ltd., Chalk River, Ontario, Canada.
Atti Sem. Mat. Fis. Univ. Modena	*Atti del Seminario Matematico e Fisico dell'Università di Modena.* [Abstracted by *Mathematical Reviews*].
Audio	*Audio.* Formerly *Audio Engineering* [*Audio Engng*].
BBC Engng Monogr.	*BBC Engineering Division Monographs.* BBC Publications, 35 Marylebone High Street, London, W.1.
Brit. Commun. and Electronics	*British Communications and Electronics.* Formerly *Communications and Electronics* (*Commun. and Electronics* [*London*]). Address unchanged.
Bull. Earthquake Res. Inst. [*Tokyo*]	*Bulletin of the Earthquake Research Institute, Tokyo.* [Abstracted by *Mathematical Reviews*].
Bull. Naniwa Univ. A	*Bulletin of Naniwa University. Series A: Engineering and Natural Sciences.* Naniwa University, Sakai, Osaka.
Dædalus	*Dædalus.* Formerly *Proceedings of the American Academy of Arts and Sciences* [*Proc. Amer. Acad. Arts Sci.*]. Address unchanged.
Dep. Sci. Industr. Res. Forest Prod. Res. Spec. Rep.	*Department of Scientific and Industrial Research, Forest Products Research, Special Report.* Her Majesty's Stationery Office, Kingsway, London, W.C.2.
ETJ Japan	*The Electrotechnical Journal of Japan.* The Institute of Electrical Engineers of Japan (The Denki-Gakkai), Yuraku-cho, Chiyoida-ku, Tokyo.
Electrotehnica	*Electrotehnica.* Str. Ion Ghica Nr. 3, Bucharest.
Elektron. Rdsch.	*Elektronische Rundschau.* Formerly *Funk und Ton.* [*Funk u. Ton*]. Address unchanged.
Elektrowärme	*Elektrowärme* [Beilage zu *Österreichische Zeitschrift für Elektrizitätswirtschaft*]. Springer-Verlag, Mölkerbastei 5, Vienna I.
Energetica Hidrotehnica	*Energetica si Hidrotehnica.* Str. Ion Ghica Nr. 3, Bucharest.
Energia nucleare	*Energia nucleare.* Via Procaccini 1, Milan.
I.R.E. Trans	*Institute of Radio Engineers Transactions.* Formerly *Transactions of the Institute of Radio Engineers Professional Group* [*Trans Inst. Radio Engrs Prof. Group*]. Address unchanged.
J. Amer. Ceram. Soc.	*Journal of the American Ceramic Society.* [Abstracted by The British Scientific Instrument Research Association].
J. appl. Physiol.	*Journal of Applied Physiology.* 2101 Constitution Avenue, Washington 25, D.C.
J. Electronics	*Journal of Electronics.* Taylor and Francis, Red Lion Court, Fleet Street, London, E.C.4; Academic Press, 125 East 23rd Street, New York 10, N.Y., U.S.A.
J. Inst. Polytech. Osaka City Univ. E	*Journal of the Institute of Polytechnics, Osaka City University: Series E, Engineering.* Osaka City University, Osaka.
J. Instn Loco. Engrs	*Journal of the Institution of Locomotive Engineers.* 28 Victoria Street, London, S.W.1.
J. Instn Telecomm. Engrs [*New Delhi*]	*Journal of the Institution of Telecommunication Engineers.* Post Box 841, New Delhi.
J. Polymer Sci.	*Journal of Polymer Science.* [Abstracted by The British Scientific Instrument Research Association].
J. Radio Res. Lab. [*Tokyo*]	*Journal of the Radio Research Laboratories.* The Radio Research Laboratories, Ministry of Postal Services, Tokyo.
"J. Stefan" Inst. Rep.	*"J. Stefan" Institute Reports.* "J. Stefan" Institute of Physics, Ljubljana, P.O.B. 199, Yugoslavia.
Japan J. Geophys.	*Japanese Journal of Geophysics.* Science Council of Japan, Ueno Park, Tokyo.
Kumamoto J. Sci. A	*Kumamoto Journal of Science. Series A* (*Mathematics, Physics and Chemistry*). Faculty of Science, Kumamoto University, Kumamoto.
Kunststoffe	*Kunststoffe.* Carl Hanser Zeitschriftenverlag, Leonhard-Eck-Str. 7, Munich 27.
Math. Scand.	*Mathematica Scandinavica.* [Abstracted by *Mathematical Reviews*].
Noise Control	*Noise Control.* Published by the American Institute of Physics for The Acoustical Society of America. 57 East 55th Street, New York 22 N.Y.

Proc. Indian Assoc. Cultiv. Sci.	*Proceedings of the Indian Association for the Cultivation of Science.* Contained in *Indian Journal of Physics.*
Proc. Instn Elect. Engrs Monogr.	*Proceedings of The Institution of Electrical Engineers, Papers and Monographs.* The Institution of Electrical Engineers, Savoy Place, London, W.C.2. Papers read at meetings, and Monographs, are published individually in advance of republication in the *Proceedings;* page numbers in *Proceedings* will be found in a later abstract.
Proc. Instn Elect. Engrs Paper	
Publ. sci. Univ. d'Alger	*Publications Scientifiques de l'Université d'Alger. Série A: Sciences Mathématiques. Série B: Sciences Physique.* Secrétaire des Publications, Faculté des Sciences, 2 rue Michelet, Algiers, Algeria.
Radiotekhnika	*Radiotekhnika.* Chistoprudnyĭ bul'var 2, Moscow.
Regelungstechnik	*Regelungstechnik.* [Article reprinted in *Entwicklungsber. Siemens & Halske*].
Rev. Mexicana Elect.	*Revista Mexicana de Electricidad.* Apartado Postal 9238, Mexico D.F., Mexico.
Rozpravy Česko Akad. Véd, Ser. TV	*Rozpravy Československé Akademie Véd, Řada TV.* Nalkadatelství Československé Akademie Véd, Václavské nám. 34, Prague II.
S.B. Dtsch. Akad. Wiss. Berlin, Kl. tech. Wiss.	*Sitzungsberichte der Deutschen Akademie der Wissenschaften zu Berlin. Klasse für technische Wissenschaften.* Akademie-Verlag, Mohrenstrasse 39, Berlin, W.8.
Scientia Sinica	*Scientia Sinica.* Formerly *Acta Scientia Sinica.* [*Acta Sci. Sinica*]. Address unchanged.
Svetotekhnika	*Svetotekhnika.* Mezhdunarodnaja Kniga, Moscow.
Trans Amer. Inst. Elect. Engrs	*Transactions of the American Institute of Electrical Engineers,* 33 West 39th Street, New York 18. Part I. Published bimonthly as *Communication and Electronics.* Part II. Published bimonthly as *Applications and Industry.* Part III. Published bimonthly as *Power Apparatus and Systems.*
Trans Elect. Supply Authority Engrs Inst. New Zealand	*Transactions of the Twenty-Fifth Annual Conference of the Electric Supply Authority Engineers' Institute of New Zealand (Inc.)* G.P.O. Box 1001, Wellington, New Zealand.
Univ. Roma Ist. Naz. Alta Mat. Rend. Mat. e Appl.	*Università di Roma. Istituto Nazionale di Alta Matematica. Rendiconti di Matematica e delle sua Applicazione.* [Abstracted by *Mathematical Reviews*].
Uspekhi Fiz. Nauk	*Uspekhi Fizicheskikh Nauk.* Mezhdunarodnaja Kniga, Moscow.
VDI Z.	*VDI Zeitschrift.* Formerly *Zeitschrift des Vereines deutscher Ingenieure* (*Z. Verein. dtsch. Ingen.* [*VDI*]). Address unchanged.
Wiss. Z. Hochsch. Elektrotech. Ilmenau	*Wissenschaftliche Zeitschrift der Hochschule für Elektrotechnik Ilmenau* Ilmenau in Thuringen, Germany.
Z. Verkehrsicherh.	*Zeitschrift für Verkehrssicherheit.* [Article reprinted in *Entwicklungsber. Siemens & Halske*].

Changes of Title

A.C.E.C. Charleroi	*Ateliers de Constructions Electriques de Charleroi.* Title changed to ACEC Revue [ACEC Rev.]. Starting with No. 1, 1955.
Acta Scientia Sinica	*Acta Scientia Sinica.* Title changed to *Scientia Sinica* starting with Volume III, No. 3 (1954).
Audio Engng	*Audio Engineering.* Title changed to *Audio.* Starting with Volume 38, No. 3, 1954.
Bol. Fac. Ingen. Montevideo	*Boletin de la Facultad de Ingenieria y Agrimensura de Montevideo.* Addition to title commencing Volume 6, Number 6.
Commun. and Electronics [*London*]	*Communications and Electronics.* Title changed to *British Communications and Electronics* [*Brit. Commun. and Electronics*] commencing with the issue dated May, 1955.
Funk u. Ton	*Funk und Ton.* Title changed to *Elektronische Rundschau* [*Elektron. Rdsch.*] starting with January, 1955.
Proc. Amer. Acad. Arts Sci.	*Proceedings of the American Academy of Arts and Sciences.* Title changed to *Dædalus* starting with Volume 86, 1955.
Trans Inst. Radio Engrs Prof. Group	*Transactions of the Institute of Radio Engineers Professional Group.* The publications of the Professional Groups of the Institute of Radio Engineers are now listed as *Institute of Radio Engineers Transactions* [*I.R.E. Trans*] in conformity with the title now in process of adoption.
Z. Verein. dtsch. Ingen. [*VDI*]	*Zeitschrift des Vereines deutscher Ingenieure.* Title changed to *VDI Zeitschrift* [*VDI Z.*] starting with issue dated *January,* 1955.

Changes of Address

Abhandlungen und Sitzungsberichte der Deutschen Akademie der Wissenschaften zu Berlin	The publisher is Akademie-Verlag, Mohrenstrasse 39, Berlin, W.8.
Acta phys. Polon.	*Acta Physica Polonica.* Institute of Physics of the Polish Academy of Sciences. Hoza 69, Warsaw, Poland.
Audio	*Audio.* P.O. Box 629, Mineola, N.Y., U.S.A.
Elektrotech. Obzor	*Elektrotechnicky Obzor.* Spálená 51, Prague II.
K. Danske Vidensk. Selsk., mat.-fys. Medd.	*Det Kgl Danske Videnskabernes Selskab, Matematisk-fysiske Meddelelser.* Dantes plads 5, Copenhagen V.
Slaboproudý Obzor.	*Slaboproudý Obzor.* Spálená 51, Prague II.
Tellus	*Tellus.* Svenska Geofysiska Föreningen, Institute of Meteorology, University of Stockholm, Lindhagensgatan 124, 5 tr., Stockholm K.

TRANSLATIONS OF FOREIGN ARTICLES
(*including RUSSIAN*)

An index of the location (in Great Britain and the Commonwealth) of existing translations of articles in foreign languages is maintained by Aslib, 4 Palace Gate, London, W.8, to whom enquiries should be directed. The titles of translations deposited at the Science Museum Library, South Kensington, London, S.W.7, are published in the Library's *Weekly List of Accessions to the Library.* The Department of Scientific and Industrial Research, Technical Information and Documents Unit, Cunard House, 15 Regent Street, London, S.W.1, has arrangements for commissioning translations from certain Russian journals on a co-operative basis; details are given in their monthly "*Translated Contents Lists of Russian Periodicals.*"

A United States national centre for holding and photoduplicating translations has been established by the National Science Foundation in the Science Division, Library of Congress, Washington 25, D.C.; monthly lists of titles are issued by the Library of Congress. The Special Libraries Association has established a translations pool in co-operation with the John Crerar Library, for languages other than Russian, and contributions are requested from organizations and individuals possessing translations. The address is: S.L.A. Translations Pool, John Crerar Library, 86 East Randolph Street, Chicago 1, Illinois.

Enquiries relating to the 1953 issues of *Zhurnal Eksperimentalnoĭ i Teoreticheskoĭ Fiziki and Zhurnal Tekhnicheskoĭ Fiziki* (Volumes 24 and 25 of the former, and Volume 23 of the latter), abstracted in *Science Abstracts*, should be directed to Technical Information Service, Department of Scientific and Industrial Research, Charles House, 5–11 Regent Street, London, S.W.1.